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C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			LIN, JASON K	
			ART UNIT	PAPER NUMBER
			2621	

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/773,166

Applicant(s)

DOI ET AL.

Examiner

Jason K. Lin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 02/09/2004, 04/08/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

The information disclosure statement (IDS) filed on 02/09/2004 is considered.

The information disclosure statement (IDS) filed on 04/08/2004 is considered.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 1-5, 12-14, and 16** rejected under 35 U.S.C. 103(a) as being unpatentable over Rauch et al. (US 5,731,844) in view of Merjanian (US 5,92,642).

Consider **claim 1**, Rauch teaches an audiovisual apparatus for presenting televisual programs (Fig. 1), comprising:

a reception unit (tuner 115, computer 100) configured to receive an electronic program guide (EPG) ("Program information" referred to in Rauch is the same as the claimed EPG because it contains program name, time of broadcast, channel indicator and description of each television program as stated

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in col 5: lines 6-8) in which televisual programs to be provided are classified into classified categories based on viewer features according to tastes of users (The information is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored... channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences.), to allow selection of the televisual program in accordance with the classified categories based on viewer features (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively ordered" also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above), together with content information of a televisual program (text display 230, picture in graphics display 240, The claimed content information of a televisual program is disclosed in Rauch as "provided with useful descriptions of the television programs" as stated in col 7: lines 55-58, lines 65-67), or independently of the content information;

a generating unit (graphics display generator 157, generates graphics) configured to generate a program selection window (The claimed program selection window is disclosed in col 4: lines 54-61, col 5: lines 13-18. The

"selection program" is displayed by the picture-in-graphics processor 155) for causing the user to select a desired program in accordance with the classified categories based on viewer features (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively ordered" also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above) from the EPG ("Program information" referred to in Rauch is the same as the claimed EPG because it contains program name, time of broadcast, channel indicator and description of each television program as stated in col 5: lines 6-8) received by said reception unit (tuner 115, computer 100); and

a selection unit configured to cause the user to select a televisual program to be reproduced or recorded from the program selection window (The claimed program selection window is displayed by the television 130, the claimed selection unit is disclosed as a input device in conjunction with the program selection window, and the program can be reproduced [displayed] and recorded as stated in col 5: lines 11-18).

Rauch et al. does not explicitly teach a personal authentication unit arranged at a portion where a finger of a viewer comes into contact with a remote controller.

In the same field of endeavor, Merjanian teaches a set top box. Merjanian also teaches a personal authentication unit (Fig. 7) arranged at a portion where a

finger of a viewer comes into contact with a remote controller (col 8: lines 8-22 discloses that "the platen 30 is exposed so that finger print data may be acquired from the operator's digit 32").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the ergonomic fingerprint reader remote control unit disclosed in Merjanian as an input device (remote control) mentioned in Rauch because allowing for authentication of various users, they can be provided with their personal preferences on what they prefer to view. See Merjanian (col 3: lines 27-53). Making the program selection process easier and less cumbersome for the user.

Consider **claim 2, as applied to claim 1 above**, Rauch et al. teaches storage means (memory 150) for storing a classified category based on viewer features of the televisual program selected from the program selection window (As disclosed in col 3: lines 41-52, the user can select specific topics and programs. User selections are stored by topic counts stated in col 12: lines 9-14); and

means for causing the user to select the televisual program to be reproduced or recorded from televisual programs belonging to the stored classified category based on viewer features (The claimed program selection window is displayed by the television 130, the claimed selection unit is disclosed as a input device in conjunction with the program selection window, and the program can be reproduced [displayed] and recorded as stated in col 5: lines 11-

18. The claimed classified category based on viewer features is disclosed as “adaptively learned order based on the number of television programs previously selected from each topic” stated in col 3: lines 41-52).

Consider **claim 3, as applied to claim 1 above**, Rauch et al. teaches said generation unit (graphics display generator 157) generates a program selection window to present only classified categories based on viewer features suitable for the user (It is according to tastes of users because it is arranged according to the frequency of previous selections in an adaptively learned order as stated in col 2: lines 28-31 and col 3: lines 41-63. The claimed program selection window is displayed by the television 130 stated in col 5: lines 14-17).

Additionally, Merjanian teaches in accordance with an authentication result (col 3: lines 27-53 states the set-top box contains “means responsive to any match for adjusting one of the service level and the preference setting”. The “match” here is the claimed authentication result as there are “means responsive” if a match is found.) of said personal authentication unit (An authentication unit is described in col 3: lines 31-39 where users can be matched to stored fingerprints on the set-top box. Fig. 7 and col 8: lines 8-22 show the embodiment of such a device).

Consider **claim 4, as applied to claim 1 above**, Rauch et al. teaches reception unit comprises at least one of:

means for receiving the EPG through one of a ground wave, a satellite wave, and a cable (The claim is worded in such a way that only one of the

limitations must be met. col 2: lines 47-64 describes "television program over cable" and the claimed EPG is described as "program name, a channel indicator, including channel name and channel number, a time of broadcast..."); and means for receiving the EPG recorded on a recording medium.

Consider **claim 5**, Rauch et al. teaches an apparatus for providing additional services for televisual programs to be distributed by broadcasting, comprising:

an electronic program guide (EPG) ("Program information" referred to in Rauch is the same as the claimed EPG because it contains program name, time of broadcast, channel indicator and description of each television program as stated in col 5: lines 6-8) generation unit (graphics display generator 157, generates graphics) configured to generate an EPG ("Program information" referred to in Rauch is the same as the claimed EPG because it contains program name, time of broadcast, channel indicator and description of each television program as stated in col 5: lines 6-8) in which televisual programs to be provided are classified into classified categories based on viewer features according to tastes of users (The information is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored... channel entries rearranged based on the



results of that monitoring” as stated in col 6: lines 52-57 allowing the device to know viewer preferences) to allow selection of a televisual program in accordance with the classified categories based on viewer features (As stated in col 2: lines 35-46, “the user can select a television program perceptively by viewing the adaptively ordered schedule layout” via a selection program col 5: lines 14-17, wherein “adaptively ordered” also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above); and

an update unit configured to update the EPG on the basis of a similarity between televisual programs selected by the users (col 9: lines 46-49 discloses the schedule information resides at the cable source and is obtained as needed by the computer 100 in real time. The only difference here is that the information can be taken whenever it’s needed, but it still falls within the same embodiment where “selection patterns can be monitored... channel entries rearranged based on the results of that monitoring” as stated in col 6: lines 52-57).

Rauch et al. does not explicitly teach a personal authentication unit arranged at a portion where a finger of a viewer comes into contact with a remote controller;

In the same field of endeavor, Merjanian teaches a set top box. Merjanian also teaches a personal authentication unit (Fig. 7) arranged at a portion where a finger of a viewer comes into contact with a remote controller (col 8: lines 8-22 discloses that “the platen 30 is exposed so that finger print data may be acquired from the operator’s digit 32”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the ergonomic fingerprint reader remote control unit disclosed in Merjanian as an input device (remote control) mentioned in Rauch.

See motivation in **claim 1**.

Consider **claim 12**, Rauch et al. teaches an apparatus for providing additional services for televisual programs to be distributed by broadcasting, comprising:

an electronic program guide (EPG) generation unit configured to generate an EPG in which televisual programs to be provided are classified into classified categories based on viewer features according to tastes of users (The information is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored... channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences) to allow selection of a televisual program in accordance with the categories (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5:

lines 14-17, wherein "adaptively ordered" also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above); and

an update unit (col 9: lines 46-49 discloses the schedule information resides at the cable source and is obtained as needed by the computer 100 in real time) configured to update the EPG on the basis of a similarity between a taste of a user and a televisual program (The information is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63.

Furthermore "selection patterns can be monitored... channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences), which is determined from contents of transactions of the user by communication (The process described in col 11: lines 29-37 and col 12: lines 7-20 pertain to an exchange of information done by user selection which is the same as the claimed transactions of the user by communication).

Rauch et al. does not teach a personal authentication unit arranged at a portion where a finger of a viewer comes into contact with a remote controller.

In the same field of endeavor, Merjanian teaches a set top box. Merjanian also teaches a personal authentication unit (Fig. 7) arranged at a portion where a finger of a viewer comes into contact with a remote controller (col 8: lines 8-22

discloses that "the platen 30 is exposed so that finger print data may be acquired from the operator's digit 32").

See motivation in **claim 1**.

Consider **claim 13**, Rauch et al. teaches a system for providing additional services, comprising:

an apparatus for providing additional services, including:

electronic program guide (EPG) generation unit configured to generate an EPG in which televisual programs to be provided are classified into classified categories based on viewer features according to tastes of users (The information is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored... channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences) to allow selection of a televisual program in accordance with the classified categories based on viewer features (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively ordered" also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above); and

an update unit (col 9: lines 46-49 discloses the schedule information resides at the cable source and is obtained as needed by the computer 100 in real time) configured to update the EPG on the basis of a similarity between televisual programs selected by the users (The information is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63.

Furthermore "selection patterns can be monitored... channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences); and

an audiovisual apparatus for presenting televisual programs (Fig. 1), including:

a reception unit (tuner 115, computer 100) configured to receive the EPG provided from said apparatus for providing additional services, together with contents information of the televisual program or independently of the contents information (The claimed contents information is shown "in an adaptively learned ordered schedule layout at the same time as both the textual and graphic description as stated in col 2: lines 35-46, wherein "adaptively ordered" also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above);

a generation unit (graphics display generator 157) configured to generate a program selection window (The claimed program selection window is disclosed in col 4: lines 54-61, col 5: lines 13-18. The "selection program" is displayed by the picture-in-graphics processor 155) for causing a user to select a desired program in accordance with the classified categories based on viewer features (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively ordered" also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above) on the basis of the EPG ("Program information" referred to in Rauch is the same as the claimed EPG because it contains program name, time of broadcast, channel indicator and description of each television program as stated in col 5: lines 6-8) received by said reception unit (tuner 115, computer 100); and a selection unit configured to cause the user to select a televisual program to be reproduced or recorded from the program selection window (The claimed program selection window is displayed by the television 130, the claimed selection unit is disclosed as a input device in conjunction with the program selection window, and the program can be reproduced [displayed] and recorded as stated in col 5: lines 11-18).

Rauch et al. does not explicitly teach a personal authentication unit arranged at a portion where a finger of a viewer comes into contact with a remote controller.

In the same field of endeavor, Merjanian teaches a set top box. Merjanian also teaches a personal authentication unit (Fig. 7) arranged at a portion where a finger of a viewer comes into contact with a remote controller (col 8: lines 8-22 discloses that "the platen 30 is exposed so that finger print data may be acquired from the operator's digit 32").

See **claim 1** for combination and motivation.

Consider **claim 14**, Rauch et al. teaches said apparatus for providing additional services comprises:

similar-program calculation means for collecting information associated with selected programs (The schedule layout is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63 meaning that previous information was collected from the "previous selections." Furthermore "selection patterns can be monitored... channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to collect information on viewer preferences) from said audiovisual apparatus (Fig. 1) for presenting televisual programs to calculate similar programs, and said audiovisual apparatus for presenting televisual programs (Fig. 1) comprises:

recommended program presentation (The program presentation [schedule layout] is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-32) means for presenting the similar programs calculated by said similar program calculation means as

recommended programs for the user (It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored... channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences).

Consider **claim 16**, an article of manufacture, comprising:

a computer usable medium having computer readable program code (memory 150) means embodied therein for causing a user to select a provided televisual program in accordance with a taste of the user (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively ordered" is categories), the computer readable program code means in said article of manufacture comprising:

computer readable program code means for causing a computer to receive an electronic program guide (EPG) ("Program information" referred to in Rauch is the same as the claimed EPG because it contains program name, time of broadcast, channel indicator and description of each television program as stated in col 5: lines 6-8) in which televisual programs to be provided are classified into classified categories based on viewer features according to tastes of users (The information is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users



because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored... channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences) to allow selection of a televisual program in accordance with the classified categories based on viewer features (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively learned order" also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above);

computer readable program code means for causing the computer to generate a program selection window (The claimed program selection window is disclosed in col 4: lines 54-61, col 5: lines 13-18. The "selection program" is displayed by the picture-in-graphics processor 155) for causing the user to select a desired program in accordance with the classified categories based on viewer features (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively learned order" also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above) from the received EPG ("Program information" referred to in Rauch is the same as the claimed EPG because it contains program name, time of broadcast, channel indicator and description of each television program as

stated in col 5: lines 6-8); and computer readable program code means for causing the computer to select a

televisual program to be reproduced or recorded from the program selection window (The claimed program selection window is displayed by the television 130, the claimed selection unit is disclosed as a input device in conjunction with the program selection window, and the program can be reproduced [displayed] and recorded as stated in col 5: lines 11-18).

Rauch et al. does not explicitly teach computer readable program code means or causing a computer to perform personal authentication of a user.

In the same field of endeavor, Merjanian teaches a set top box. Merjanian also teaches computer readable program code means or causing a computer to perform personal authentication of a user (col 9: lines 16-18 discloses the use of different items possible to perform matching to identify the user. Part of the authentication is programmed in software into the set-top box col 11: lines 26-28. col 11: lines 30-43 describe the authentication process used to authenticate the user).

See combination and motivation in **claim 3**.

4. **Claims 6 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rauch et al. (US 5,731,844) in view of Merjanian (US 5,92,642), and further in view of Lawler (US 5,758,259).

Consider **claim 6, as applied to claim 5 above**, Rauch et al. teaches update unit (col 9: lines 46-49 discloses the schedule information resides at the

cable source and is obtained as needed by the computer 100 in real time)  
comprises:

Neither Rauch et al. or Merjanian teach a means for adding televisual programs from other than a classified category based on viewer features selected by another user having a taste similar to that of a user to the EPG to be commonly provided to all the users, on the basis of the similarity between televisual programs selected by the users.

In the same field of endeavor, Lawler teaches an interactive television system and personalized guides. Lawler also teaches a means for adding televisual programs from other than a classified category based on viewer features selected by another user having a taste similar to that of a user to the EPG to be commonly provided to all the users, on the basis of the similarity between televisual programs selected by the users (col 2: lines 31-44 disclose "provides a viewer on an IT system with a programming guide that is automatically personalized based on the viewing history of the viewer". Col 9: lines 59-62 discloses that "histories of other viewers with similar viewing histories could be retrieved and used to identify preferred programs...").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the modified apparatus of Rauch et al. in view of Merjanian to have programs automatically personalized based on the viewer's viewing history to provide viewer's with desirable programming choices that best suit their needs.

Consider **claim 11, as applied to claim 5 above**, Rauch et al. teaches said update unit (col 9: lines 46-49 discloses the schedule information resides at the cable source and is obtained as needed by the computer 100 in real time) comprises:

Neither Rauch et al. or Merjanian teaches a means for analyzing video data, calculating an appearance time of each performer, and accumulating a numerical value corresponding to the appearance time of the performer in place of a keyword representing a feature of contents of a televisual program to calculate a weight coefficient of the performer, thereby calculating the similarity.

In the same field of endeavor, Lawler teaches an interactive television system and personalized guides. Lawler also teaches a means for analyzing video data, calculating an appearance time of each performer, and accumulating a numerical value corresponding to the appearance time of the performer in place of a keyword representing a feature of contents of a televisual program to calculate a weight coefficient of the performer, thereby calculating the similarity (Lawler discloses the preference database was created by previous programs selected by the viewer and a numerical value is calculated for each name, genre, subgenre, and team, and the matching programs are generated and sent to the user col 7: line 62 – col 8: line 34).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the modified apparatus of Rauch et al. to have the appearance time of a performer calculated and making a

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numerical value and calculating the similarity using the weight of the number as taught by Lawler in order to present programs with performers that would be tailored to the viewer.

5. **Claims 7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rauch et al. (US 5,731,844) in view of Merjanian (US 5,92,642), further in view of Lawler, further in view of Alexander (US 6,177,931) and in view of Wilkins (US 5,446,919).

Consider **claim 7, as applied to claim 5 above**, Lawler teaches adding televisual programs from other than a classified category based on viewer features selected by another user having a taste similar to that of a user to the EPG to be commonly provided to all users, on the basis of the similarity between the taste of the user and a televisual program (col 2: lines 31-44 disclose "provides a viewer on an IT system with a programming guide that is automatically personalized based on the viewing history of the viewer". Col 9: lines 59-62 discloses that "histories of other viewers with similar viewing histories could be retrieved and used to identify preferred programs...").

Neither Rauch et al., Merjanian, or Lawler teaches a means for collecting contents of transactions for goods purchases by mail orders.

In the same field of endeavor, Alexander teaches EPG's. Alexander also teaches a means for collecting contents of transactions for goods purchases (Updating statistics of user interactions with the EPG based on viewing history col 29: lines 31-55. Viewer buying [purchase] history is analyzed and is used to

determine programs to present to user col 30: lines 17-44. The profile used to generate EPG col 30: lines 45-58).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the modified apparatus of Rauch et al. in view of Merjanian to collect contents of purchase transactions as taught by Alexander because it allows pertinent programming information to be sent to the viewer based on the purchase history.

Neither Racuh, Merjanina, Lawler, nor Alexander explicitly discloses mail orders.

In the same field of endeavor, Wilkins teaches broadcast and cable network systems. Wilkins also teaches collecting contents of transactions for goods purchases by mail orders (col 4: lines 11-28 discloses that "mail-order purchase records" can be compiled to be used as information. This information can be used to form a "master database" disclosed in col 8: lines 15-29 where the mail-order information contents can be collected and stored).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rauch in view of Merjanina, and further in view of Alexander and Wilkins to have the purchases in the form of mail order in order to enable the viewer to mail in purchase information after seeing an infomercial on TV.

Consider **claim 8**, Rauch et al., Merjanian, and Lawler teaches said update unit (*See Rauch et al.*, col 9: lines 46-49 discloses the schedule

information resides at the cable source and is obtained as needed by the computer 100 in real time) comprises:

selecting a televisual program on the basis of the similarity between the taste of a user and a televisual program, and adding televisual programs other than a classified category based on viewer features to the classified category based on viewer features in the EPG to be commonly provided to all users. (See *Lawler*, col 2: lines 31-44 disclose "provides a viewer on an IT system with a programming guide that is automatically personalized based on the viewing history of the viewer". Col 9: lines 59-62 discloses that "histories of other viewers with similar viewing histories could be retrieved and used to identify preferred programs...").

Neither Rauch et al., Merjanian, or Lawler teaches a means for collecting contents of transactions for goods purchases by mail orders.

See **claim 7** for combinations and motivations.

6. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rauch et al. (US 5,731,844) in view of Merjanian (US 5,92,642), and further in view of Borseth (US 6,340,997).

Consider **claim 9, as applied to claim 5 above**, Rauch et al. teaches said update unit (col 9: lines 46-49 discloses the schedule information resides at the cable source and is obtained as needed by the computer 100 in real time) comprises:

Rauch et al. does not explicitly teach means for analyzing a closed caption to extract a keyword representing a feature of contents of a televisual program, thereby calculating the similarity.

In the same field of endeavor, Borseth teaches means for analyzing a closed caption to extract a keyword representing a feature of contents of a televisual program, thereby calculating the similarity (col 9: lines 40-51 disclose that the VBI data can include closed captioning information that can be used to create or update an electronic program guide. An EPG contains information about the content like time, channel, genre, etc pertaining to the televisual programs. Since an EPG can be created by the closed caption data keyword[s] can be extracted from the closed caption data).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the modified apparatus of Rauch et al. to update the EPG based on closed captioning text as taught by Borseth in order to provide program data to the deaf community for updating their EPG.

7. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rauch et al. (US 5,731,844) in view of Merjanian (US 5,92,642), and further in view of Schindler (US 5,995,155).

Consider **claim 10, as applied to claim 6 above**, Rauch et al. teaches said update unit (col 9: lines 46-49) comprises:

Rauch et al. and Merjanian does not explicitly teach means for recognizing audio data in a transmission signal of a televisual program, converting the audio



data into a text, and extracting a keyword representing a feature of contents of the televisual program from the text, thereby calculating the similarity.

In the same field of endeavor, Schindler teaches means for recognizing audio data in a transmission signal of a televisual program ("recognizes at least a few words from current television programming" col 13: lines 20-25), converting the audio data into a text ("speech recognition circuitry is used to convert speech to text..." col 4: line 35), and extracting a keyword representing a feature of contents of the televisual program from the text, thereby calculating the similarity (col 13: lines 12-20 describes an auto surf function that can extract keyword[s] from the closed captioning of a televisual program alerting the user to desired programming. Where closed captioning information is unavailable speech to text recognition is used in its place to get the textual information as stated in col 13: lines 20-25).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the modified apparatus of Rauch et al. to update the EPG based on speech to text recognition circuitry as taught by Schindler in order to provide program data to the deaf community for updating their EPG.

8. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rauch et al. (US 5,731,844) in view of Merjanian (US 5,92,642), and further in view of Alexander (US 6,177,931).

Consider **claim 15**, Rauch et al. teaches a system according to claim 14, wherein said similar-program calculation means comprises:

Neither Rauch et al. or Merjanian teaches a means for collecting information of goods purchased on a network and calculating the similarity by using the information as a material for judging the taste of the user together with a keyword representing a feature of a televisual program, which is obtained from event information (EIT) attached to contents of the televisual program.

In the same field of endeavor, Alexander teaches a means for collecting information of goods purchased on a network (purchase history information are gathered and analyzed as disclosed in col 29: lines 50-55 and col 30: lines 17-25) and calculating the similarity (User profiles are compared to profiles of others to determine if the user might be interested in a particular "subject, product, theme, movie, episode, etc" col 30: lines 38-44) by using the information as a material for judging the taste of the user together with a keyword representing a feature of a televisual program (col 30: lines 17-44 discloses analyzing viewer buying history and determining the programs to present to the user), which is obtained from event information (EIT) attached to contents of the televisual program (profile gathers information from the internet col 30: lines 1-16 and is used to generate an EPG col 30: lines 45-58. The EIT in this case is the related information that can be accessed via the EPG or World Wide Web pertaining to the telecast and also related to the user's preferences).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the modified apparatus of Rauch et al. to have the purchase history determine the EPG for a user as taught by Alexander in order to present products that are of interest to the viewer.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lewis discloses an interactive ordering system via a closed cable network that generates mail order to cataloger telephone line in US 5,638,426.

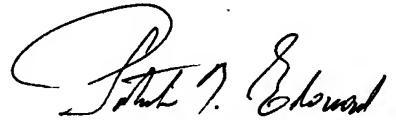
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason K. Lin whose telephone number is (571)270-1446. The examiner can normally be reached on Mon-Fri, 7:30AM-5:00PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571)272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Jason Lin  
10/13/2006



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